

(12) **UK Patent Application** (19) **GB** (11) **2 237 160** (13) **A**
(43) Date of A publication 24.04.1991

(21) Application No 9019620.5

(22) Date of filing 07.09.1990

(30) Priority data

(31) 8923066

(32) 13.10.1989

(33) GB

(71) Applicant

Cheetah International Limited

(Incorporated in the United Kingdom)

Norbury House, Norbury Road, Fairwater, Cardiff,
CF5 3AS, United Kingdom

(72) Inventor

Howard Jacobson

(74) Agent and/or Address for Service

Mewburn Ellis

2 Cursitor Street, London, EC4A 1BQ, United Kingdom

(51) INT CL⁴

H04B 1/08

(52) UK CL (Edition K)

H3Q QACX

U1S S2424

(56) Documents cited

None

(58) Field of search

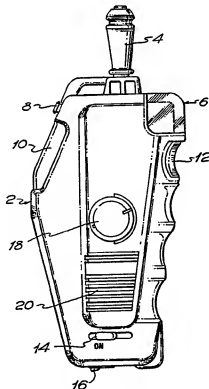
UK CL (Edition K) H3Q QACX

INT CL⁴ H04B 1/08

Online databases : WPI

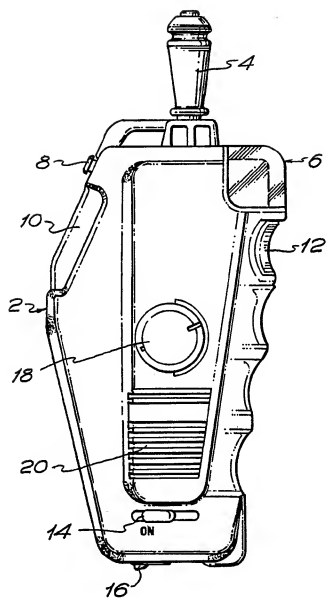
(54) **A joystick or mouse with built in radio receiver**

(57) The combination of a joystick used with a computer for playing computer games and a radio receiver is housed in a moulded plastics case (2). The joystick is provided with control stick (4) associated electronic equipment (6) and fire buttons (10, 12). The radio receiver is housed in the lower part of the case (2) and includes a main on/off switch (14), a wave band selection switch (16), a tuner knob (18), and a loudspeaker grill (20). A jack (8) is provided for the use of headphones.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

GB 2 237 160 A



"A MOVABLE ELECTRONIC DEVICE FOR
PLAYING COMPUTER GAMES

The present invention relates to a movable electronic device for playing computer games and in particular to a combination of a joystick or other movable electronic device used with a computer for playing computer games and a radio receiver.

Known types of joystick for computer games has already been disclosed in our British Patent Specification Nos. 2,210,145 and 2,158,667.

In accordance with the present invention there is provided the combination of a joystick or other device used with a computer for playing computer games and a radio receiver.

The radio receiver may be provided with three band reception, preferably medium wave AM, long wave AM and VHF FM.

In the case where the combination includes a joystick it may be of any known type.

Preferably, the joystick may either be of the type having the rotational feature shown in our British Patent Specification No. 2,210,145, or of the type disclosed in our British Patent Specification No. 2,158,667 having the infra-red link.

In the case of a computer game not utilizing a

joystick, the radio receiver may be combined with some other electronic device, e.g. an electronic mouse.

The present invention will now be described in greater detail by way of example with reference to the accompanying drawing, wherein the sole figure is a side elevation view of one preferred form of combined joystick equipment provided with an infra-red link to the computer, and a three band radio receiver.

Referring to the drawing, the combined joystick and radio receiver consists of a moulded plastic case 2 split into two side halves, the two sides being held by means of self tapping screws (not shown). The upper part of the casing houses a conventional type of control stick 4 and the associated switches, switch encoder mechanism, pulse position modulator, pulse amplifier and the infra-red transmitter, as disclosed in our British Patent Specification No. 2,158,667, these parts being generally indicated by the reference numeral 6 to identify the position of the infra-red link. Two fire buttons 10 and 12 are provided respectively on the front and the back of the casing.

The radio receiver is provided in the lower half of the casing 2 and is powered by batteries (not shown). A suitable sliding flap can be provided to replace the batteries or the two halves of the casing can be unscrewed. The radio receiver controls include a main on/off switch

14, a wave band selection switch 16, and a tuner knob 18. The side of the casing 2 is also provided with a loudspeaker grill 20, and jack 8 is provided in the upper part of the casing 2 so that headphones can be used. A
5 mute switch (not shown) is provided to isolate the loudspeaker where it is desired to use headphones. The radio receiver circuitry would include integrated circuits which could be built into the printer circuit board of the joystick itself, and a suitable aerial would have to be
10 positioned within the casing 2, to enable the reception of both medium and long wave AM as well as VHF FM.

The above described joystick and radio receiver combination is thus fully portable, and shaped so that it conveniently sits in the hand of the user. When used with
15 the computer in a computer game, it is connected to the computer via the infra-red link 6. When not used with the computer, it may be taken to another location and used as a radio receiver, either with or without headphones.

In an alternative form the joystick may be
20 provided with the "rotational" feature as disclosed in our British Patent Specification 2,210,145. In this form, the joystick includes at least two additional contacts in its base assembly, which can be contacted by twisting of the handle assembly in either a clockwise or anti-clockwise
25 direction. Such a construction is hereinafter referred to as the "rotational" type.

Although the above described embodiment includes the possibility of the infra-red link, it will be appreciated that the combination would be equally applicable to other types of joysticks which are connected to the computer via a cable. In this case, an additional jack is provided with the casing 2 to enable the joystick to be connected to the computer by means of a cable.

Furthermore, when a joystick is not used, the radio receiver may be combined with some other piece of movable electronic, e.g. an electronic mouse.

CLAIMS:

1. The combination of a joystick or other device used with a computer for playing computer games and a radio receiver.
- 5 2. The combination according to claim 1, wherein the radio receiver is provided with three band reception.
3. The combination according to claim 2, wherein said three band reception is medium wave AM, long wave AM and VHF FM..
- 10 4. The combination according to any one of the preceding claims, wherein the joystick is of the "rotational" type as hereinbefore defined.
5. The combination according to any one of the preceding claims, wherein the joystick is provided with an
- 15 infra-red link between it and the computer.
6. The combination according to any one of the preceding claims 1 to 3, wherein said other device is an electronic mouse.
7. The combination of a joystick and radio receiver
- 20 constructed substantially as herein described with reference to and as illustrated in the accompanying drawing.